7a

Student Worksheet

Fire Behavior & Weather
Investigation

Transpiration/Dry Air Lab

A. Record the results of the *Dry Air Lab* below:

Relative Humidity

	WET Bulb Reading	DRY Bulb Reading	% of Relative Humidity
BEFORE the lab	_____°F _____°C	_____°F _____°C	_____
AFTER the lab	_____°F _____°C	_____°F _____°C	_____

Transpiration Level

At Start_____ **3 min.** _____ **6 min.**_____

9 min._____ **12 min.** _____ **15 min.** _____

18 min._____ **21 min.**_____ **24 min.**_____

27 min_____ **At End** _____

B. Using complete sentences, answer the questions based on the data collected in the *Dry Air Lab*:

1. What weather conditions does the fan represent?_____

2. How did the "wind" affect the moisture level of the plant?_____

3. How do dry, Santa Ana winds contribute to fire behavior?_____

4. What do you think caused any difference in the relative humidity before and after the lab? _____

5. If the wind came off the ocean, rather than the mountains, how would this affect fuel moisture, based on your knowledge of relative humidity?

7b

Student Worksheet

Fire Behavior & Weather
Investigation

GLOBE Atmosphere Investigation

Using complete sentences, answer the questions based on the data collected in the *Globe Atmosphere Investigation*:

1. Did the air appear to be stable or unstable? Why?

2. Was the relative humidity high or low? How did this relate to the time of day?

3. Was the current temperature high or low? How is this typical, or not typical for this time of year?

4. Based solely on the atmospheric data gathered, would you consider the conditions to be "High Risk" for fire; "Moderate Risk" for fire; or "Low Risk" for fire? Why?